DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011688 Address: 333 Burma Road **Date Inspected:** 26-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Fawen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No

Yes No N/A **Delayed / Cancelled: Bridge No:** 34-0006 **Component:** Orthotropic Box Girder (OBG) Components

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY 1

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 002 located on Traveler Rail Bracket 13TB1 – 093. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - Tc - U4b - F.

Weld joint # 002 located on Traveler Rail Bracket 13TB1 – 020. Welder is identified as 216575. ZPMC Quality Control (QC) Inspector is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - Tc - U4b - F.

BAY 2

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005141

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Magnetic Particle Testing (MT)

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. LD3023 – 001 – 032; 038; 044; 056; 066; 072; 078; 090

2. LD3024 – 001 – 032; 038; 044; 056; 066; 072; 078; 090

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Repair welding of a weld joint # 006 according to weld repair report #B-WR10450 located on Traveler Rail 10TR2 – 009. Welder is identified as 045227. ZPMC Quality Control (QC) Inspector is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

Repair welding of a weld joint # 014 according to weld repair report #B-WR10452 located on Traveler Rail 10TR2 – 009. Welder is identified as 045227. ZPMC Quality Control (QC) Inspector is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

BAY 6

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 001 located on U-rib connection plate USPL1 – 311. Welder is identified as 048625. ZPMC Quality Control (QC) Inspector is identified as Shu Yang Hua. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - Tc - U4b - F.

Weld joint # 002 located on U-rib connection plate USPL1 – 309. Welder is identified as 051246. ZPMC Quality Control (QC) Inspector is identified as Shu Yang Hua. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4b – F.

BAY 7

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Repair welding of a weld joint # 006 according to weld repair report #B-WR10331 located on Traveler Rail 11TR3 – 010. Welder is identified as 066443. ZPMC Quality Control (QC) Inspector is identified as Zhong Dian Xing. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

Repair welding of a weld joint # 005 according to weld repair report #B-WR10335 located on Traveler Rail

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11TR3 - 011. Welder is identified as 069043. ZPMC Quality Control (QC) Inspector is identified as Zhong Dian Xing. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

Heat Straightening:

Heat Straightening being performed on OBG Traveler Rail identified as 11TR3 – 017 by oxy-acetylene flame method to remove the distortion that occured after welding. ZPMC Quality Control (QC) Inspector is identified as Zhong Dian Xing present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (B) – 8087. (See attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer